

exchanger to retain the low temperature of the coolant water. Another modification of the system utilises the conveyor principle so that cooked food emerging from a packaging plant on a production line is transferred directly to the water chiller where it is immersed for a pre-set time to ensure complete chilling. The controls on iced water bath chillers are much the same as those described above for air-blast and cryogenic chillers and many are fully programmable.

CHILLED STORAGE

Chapters 2 and 3 discussed at some length the importance of maintaining chilled food at a constant low temperature (between 0 and 3°C and, if possible at 0–2°C) in order to inhibit or, at least, minimise microbial growth during storage—a topic that will be taken up again in Chapters 8 and 9. It goes without saying then, that all cook-chill units require first class chill storage units to enable such control. It cannot be stressed enough that these are not refrigerators (which generally operate to much looser tolerances and have average temperatures some 2–5°C higher than proper chill stores). Thus, any caterer who uses such devices, even for short term storage of cook-chill foods, is taking unacceptable risks.

Cook-chill foods can be stored either in cold rooms or chill cabinets. Both utilise enclosed areas which are cooled by compressor units and both are built to specification to re-circulate cold air at a temperature between 0 and 3°C. Cold rooms are often built as part of a continuous system with chillers or cold portioning rooms leading directly into them. Cabinets are available as 'roll-in' types to take food on trolleys, free standing or on wheels. Many cook-chill operators utilise banks of cabinets which together can have the capacity of a large cold room but which allow the 'roll-in-roll-out' principle to be used.

All systems must be adequately fitted with controls which should include:

• A minimum number of sensors placed within a central area